

# The Range Rider



## THE "OCTOPUS" OF THE RANGE

Each spring in part of the range country of the Southwest, prior to shearing time and during lambing season, an unusual hazard to the range sheep industry is the scourge of the Sotol. Sotol (or, to the scientifically minded, *Dasyliirion leiophyllum*-Englem) is a semi-desert shrub related to the Yuccas which grows generally on rocky hills. In New Mexico it is confined to the southern and warmer portions of the State. It is found in abundance in certain fenced pasture sheep ranges of the southwestern part of New Mexico Grazing District No. 6 and in the eastern part of New Mexico Grazing District No. 5.

Within the wolf-proof pastures of the Southwest, sheep are allowed to graze at will without the guidance and protection of a herder. Pastures vary in size from two to ten square miles, each provided with stock water and stocked with an appropriate number of sheep according to its proper carrying capacity. In these pastures Sotol provides some feed for grazing animals. Tender flowering stalks grow from the center of the leaf rosette in the early spring. These are relished by livestock.

Like many other desert plants, Sotol was equipped, by Nature, with protective devices. Sotol's devices are modifications of the leaf structure consisting of recurved, hooked spines along the margin of strap-shaped leaves. These spines have the effect of a cat's claw on fibrous material and, like an octopus, firmly hold anything which comes within their grasp. Whether Nature intended that these devices should serve as a means of enriching the soil through their power to catch and hold livestock and other organic matter is problematical, but evidence is strong in favor of such an assumption.

During spring storms the Sotol hazard is aggravated. The mother sheep, unshorn and heavy with lamb, or with suckling lamb, seeks shelter. Sotol, because of its dense growth of leaves, provides one of the best available windbreak and storm shelters. Wet wool is particularly subject to entanglement with the hooked tentacles of the subtle Sotol. Wet wool is heavy and a trapped ewe, weak from unsuccessful attempts to free herself, eventually falls. The strong tentacles become further entangled in







the wool and render the victim completely helpless in renewed attempts to escape. If help is not received the ewe soon dies and her carcass, and probably that of her lamb, go to furnish soil and plant nutrients to the captor and to its progeny. Such is the toll of the Sotol.

(--S. M. Miera and R. D. Nielson, Region 7)

(Note: Sotol has a fleshy stem where the leaves are produced which is cut and broken open for emergency feed for cattle. It is this same portion of the plant which is cut and roasted by Spanish-speaking people to obtain an alcoholic drink called "sotol.")

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#### FACTS AND FIGURES

Mr. A is a livestock operator in Oregon Grazing District No. 2. For many years he has used the range in that area but with no particular benefit until recently because of the lack of water.

Now Mr. A runs 2,000 sheep in the district. Because of stock water improvements constructed by the Grazing Service he is able to utilize every portion of his allotment.

Until this year, Mr. A's lamb crop averaged about 70 percent and he lost a considerable number of ewes each year. In 1940 his lamb crop was well over 100 percent with a small loss in ewes.

Getting down to dollars-and-cents calculations of the value received by Mr. A in one year, we find something like this:

30 percent increase in lamb crop.

Better lambs because the bands could remain at lambing grounds with sufficient water and feed until the lambs were old enough to travel.

\$3,000 estimated saving to Mr. A, effected by stock water developments on the range.

Value of these same developments from year to year in the future.

(Camp G-91--Alkali Lake, Oregon--which developed the trench-type reservoirs on Mr. A's allotment has a program outlined for the construction of 168 similar developments in the camp area. This work is progressing at the rate of six reservoirs per month.)

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The Washington office staff got together for lunch on Wednesday, June 12, to say "good-bye and good luck" to Tommy Thompson of the accounts section who is leaving the Grazing Service to accept a position with the Andes Copper Company in South America.







MAGPIE POISONING

The destructiveness of great numbers of magpies in the vicinity of the Woodriver, Idaho CCC camp has prompted a counter-attack by Rodent Control Foreman Schwarz. These birds attack domestic livestock and their particular fondness for the eyes of newly born lambs is the reason for many blind sheep. Nearly 4,000 eggs and approximately 400 birds have been destroyed during the last several months by the fellows at G-144.

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SQUAW BUTTE HOST TO COLLEGE STUDENTS

Thirty-four students of range management and animal husbandry accompanied by several professors from Oregon State Agricultural College spent four days at Squaw Butte Range Station recently for field training in range survey methods being taught at the College and put into practice at Squaw Butte Station. The men "batched" in the assembly hall on the station grounds and reported a highly instructive sojourn at Squaw Butte.

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The Bridger, Montana camp established something of a record recently when it completed the creosoting of 3,623 fence posts in 26 days at a cost of approximately 10 cents per post. The material used was a mixture of equal parts of creosote and gas-oil. The posts were placed in a tankful of the mixture to a depth of two feet and heated for approximately four hours, after which they were placed in a "cold" tank. Tests were made of the results obtained which showed penetration up to one-half inch, depending upon the kind of wood in the post.

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MR. AND MRS. SAGE HEN AT HOME

The "home life" of one of the wild game birds which the Grazing Service is pledged to help conserve and protect has been described cleverly by Junior Range Examiner Dean E. Mahaffey in an article appearing in a recent issue of the Colorado region's news sheet, entitled "The Fan and Bubble Dance." Mr. Mahaffey draws the title for his story from the manner in which Mr. Sage Grouse "shows off" in front of the Mrs. While spreading his wings in fan-dance style, Mr. S. G. suddenly inflates his breast, throws back his head and bobs around with abandon and ecstasy as bright yellow air sacs, which have swelled up like balloons, deflate with an explosive "plop-kerplop." All of this is said to create a mystifying sound to the uninitiated.

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Mr. Harry T. Swan, camp engineer G-93, Oregon, was an office visitor this week while vacationing in the East with Mrs. Swan.

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OUT OF THE MAIL BAG

Idaho. The first fire of the season in Idaho occurred May 28, approximately 12 miles north of Boise. The District No. 1 office received the report at 2:30 p.m. and a foreman with a truck load of fire fighters was dispatched from a nearby camp. At 6 p.m. the fire was suppressed after having burned over about 80 acres of cheat grass and sagebrush on Federal range.

New Mexico. As a result of favorable moisture conditions in this region it is interesting to note that the sagebrush area in the northern portion of the State and in District No. 7 is supporting an especially fine crop of bluestem grass. During the past several dry years our observations have failed to indicate any appreciable amount of grass in this type of range, and it has always been our supposition that areas embracing a dense stand of sagebrush were not capable of supporting any amount of the desirable species of grass. It is hoped that this is not a temporary condition, but that proper stocking and good range management practices, together with favorable weather conditions, will prove it to be a permanent improvement.

Oregon. Mr. Natanson, WPA Writers' Program, spent a day with Kenneth Platt at Squaw Butte Range Station and then made a tour with Junior Grazier Aid Stearns over Wagontire Mountain, and East and West Silver Creek Units, interviewing cattle and sheep operators, inspecting typical cattle and sheep ranges, water holes, drift fences and reservoir improvements, and the actual use made of these developments by the livestock in the area. Mr. Natanson visited three sheep camps and witnessed lambing operations on the open range in the Sage Hen area. Egli Ridge was shown to him as a typical area adapted for use by horses while Wagontire Mountain was pointed out as a typical cattle range. The purpose of this tour was to acquaint Mr. Natanson with general range conditions in this area, to show him typical livestock operations, the dependency of these operations on Federal range, and the important part the Grazing Service plays in cooperation with stockmen to bring about the proper use of Federal range lands.

Utah. At camp G-160, Hurricane, several springs are being developed into one source and the water piped a distance of four miles into extremely dry range areas. Several sets of troughs are being installed along the pipe line.

Nevada. Carson River Stock Bridge, constructed under the supervision of Myron Horsley of G-87, is a beautifully constructed and worthwhile project. The construction is complete in every detail from coating of the suspension cables with heavy tar to the blinds along the wings of the approach to the bridge.

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"It has been very aptly observed that the love of nature is a matter of aesthetics, the understanding of nature is a science, while the correct use of natural resources is economics." (--Congressional Record, June 6, 1940)



